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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,753	01/28/2000	Clifford A McCarthy	10992091	2627

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EXAMINER

TANG, KENNETH

ART UNIT	PAPER NUMBER
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2195

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/493,753	MCCARTHY ET AL.	
	Examiner	Art Unit	
	Kenneth Tang	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,2,5-8,12,13 and 18 is/are rejected.
- 7) ☒ Claim(s) 3,4,9-11,14-17,19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This non-final rejection is in response to the Appeal Brief on 4/21/06. Prosecution has been reopened and new grounds of rejections have been made.
2. Claims 1-20 are presented for examination.

### ***Allowable Subject Matter***

3. Claims 3-4, 9-11, 14-17, and 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. In claim 1, the claimed invention is directed to non-statutory subject matter because it does not fall under one of the four categories of 35 U.S.C. § 101. The Examiner recommends amending “a system” (line 1) to be “a computer system” with every occurrence of computer itself and system to state “computer system.”
5. 35 U.S.C. § 101 defines four categories of inventions that Congress deemed to be the appropriate subject matter of a patent: processes, machines, manufactures and compositions of matter. The latter three categories define “things” or “products” while the first category defines “actions” (i.e., inventions that consist of a series of steps or acts to be performed). See 35 U.S.C.

100(b) (“The term ‘process’ means process, art, or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.”).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**6. Claims 1-2, 7-8, 12-13, and 18 are rejected under 35 U.S.C. 102(a) as being anticipated by Stankovic et al. (hereinafter Stankovic) (“The Case for Feedback Control Real-Time Scheduling”, published in 1999).**

7. As to claims 1, 12, 18, Stankovic teaches a method, system and program for managing allocation of computer resources among applications operating on a computer, based upon at least one user-defined goal for at least one application and application performance information related to the one application, the system comprising:

a calculator that determines an allocation request value using a proportional factor, an integral factor, and a derivative factor, (PID) wherein the factors are calculated from the at least one user-defined goal (*user, “we”, chooses the objective, page 4, sections 3.1*) and the performance information (*see PID control formula, page 3, section 2.1*).

an arbiter (actuators used by the scheduler for the adjusting/manipulating) that is operative to adjust the allocation request value into an adjusted allocation value when the allocation request value and allocation request values associated with other applications exceeds a predetermined value (*pages 4- 5, Section 3.1*).

8. As to claims 2 and 13, Stankovic teaches wherein:

the proportional factor includes a proportional constant and a proportional variable, wherein the proportional constant is a user-selectable input, and the proportional variable is determined from the at least one user-defined goal and the performance information;

The integral factor includes an integral constant and a integral variable (*see the PID control formula on page 3, Section 2.1*),

Wherein the integral constant is a user-selectable input, and the integral variable is determined from the at least one user-defined goal and the performance information (*see the PID control formula on page 3, Section 2.1*); and

The derivative factor includes a derivative constant and a derivative variable (*see the PID control formula on page 3, Section 2.1*),

Wherein the derivative constant is a user-selectable input, and the derivative variable is determined from the at least one user-defined goal and the performance information (*see the PID control formula on page 3, Section 2.1*).

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9. As to claim 7, Stankovic teaches wherein: the performance information is generated by a performance monitor that monitors a characteristic of the application associated with the goal *(actuators used by the scheduler for the adjusting/manipulating) (pages 4- 5, Section 3.1)*.

10. As to claim 8, Stankovic teaches wherein: the allocation request value is used by a process resource manager to allocate computer processing resources among the applications operating on the computer *(pages 4- 5, Section 3.1)*.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**11. Claims 5-6 is rejected under 35 U.S.C. 103(a) as being unpatentable by Stankovic et al. (hereinafter Stankovic) (“The Case for Feedback Control Real-Time Scheduling”, published in 1999).**

12. As to claim 5, Stankovic teaches wherein a number format for each of the at least one user-defined goal, the performance information, and the allocation request value is selected from the group consisting of: a floating point number, and an integer number *(see the PID control formula on page 3, Section 2.1)*. Stankovic teaches the value being a percentage. It is well

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known to one of ordinary skill in the art that a percentage could be either an integer or a float value, depending upon the particular division by 100.

13. As to claim 6, Stankovic fails to explicitly teach a rounder that uses cumulative rounding to adjust the floating point allocation request value into an integer number. However, it is well known in the art and obvious that the values can be rounded cumulatively. This standard is used because it allows for simplification.

#### ***Response to Arguments***

14. Applicant's arguments have been fully considered but are now moot in view of the new grounds of rejections.

#### ***Conclusion***

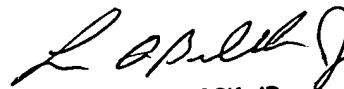
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kt  
8/3/06

  
LEWIS A. BULLOCK, JR.  
PRIMARY EXAMINER